REMARKS

The Office Action dated August 2, 2007, has been received and carefully noted. The above amendments to the specification and claims, and the following remarks, are submitted as a full and complete response thereto.

By this Response, claims 1-15 have been amended, and new claim 16 has been added, to more particularly point out and distinctly claim the subject matter of the present invention. The Abstract of the disclosure has been amended to correct a minor informality. No new matter has been added. Support for the above amendments and the new claim is provided in at least paragraph [0010]. Accordingly, claims 1-16 are currently pending, of which claims 1, 13, and 16 are independent claims.

In view of the above amendments and the following remarks, Applicant respectfully requests reconsideration and timely withdrawal of the pending objections to the Specification and the pending rejections to the claims for the reasons discussed below.

Specification

The Office Action objected to the Abstract of the disclosure because of minor informalities. Specifically, the Office Action objected to the use of "The invention relates to" in line 1 of the Abstract, and the term, "means," in line 2 of the Abstract.

Accordingly, Applicants have amended the Abstract of the disclosure to comply with the requirements of MPEP §608.01(b).

Therefore, Applicants respectfully request withdrawal of the objections to the Abstract of the disclosure.

Claim Objections

The Office Action objected to claim 4 because of minor informalities. Specifically, the Office Action indicated that insufficient antecedent basis is provided for the limitations "to the receivers" in line 3 and "the cell" in line 3.

Accordingly, Applicants have amended claim 4 to render the antecedent basis problem for the limitations "to the receivers" in line 3 and "the cell" in line 3 moot.

Therefore, Applicants respectfully request withdrawal of the objection to claim 4, and respectfully submit that claim 4 is now in condition for allowance.

Claim Rejections under 35 U.S.C. §112, Second Paragraph

The Office Action rejected claim 13 under 35 U.S.C. §112, second paragraph, as allegedly being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention. Specifically, the Office Action indicated that claim 13 fails to provide sufficient antecedent basis for the limitation, "the network" in line 11.

Accordingly, Applicants have amended claim 11 to replace "the network" with "the internet protocol network" to more particularly point out and distinctly claim the subject matter which Applicants regard as the invention.

Therefore, Applicants respectfully request withdrawal of the rejection of claim 11, and respectfully submit that claim 11 is now in condition for allowance.

Claim Rejections under 35 U.S.C. §102(a)

The Office Action rejected claims 1-9, 11, and 13-15 under 35 U.S.C. §102(e) as allegedly anticipated by Farinacci, *et al.* (U.S. Patent Publication No. 2006/0203819) ("Farinacci"). Applicants respectfully submit that the claims recite subject matter that is neither disclosed nor suggested in Farinacci.

Claim 1, upon which claims 2-12 are dependent, recites a method. The method includes transmitting multicast data packets in at least one first multicast tree from one transmitter through a plurality of multicast controllers to a plurality of recipients, and generating at least one second multicast tree configured to control messages in an internet protocol network from a network multicast controller to at least one multicast controller at cell level. The method also includes transmitting the control messages from the network multicast controller along the at least one second multicast tree to the at least one multicast controller at cell level. The control messages include information on the multicast transmission of the internet protocol network and a command configured to connect to the at least one first multicast tree of the network configured for multicasts.

Claim 13, upon which claims 14-15 are dependent, recites an arrangement for implementing multicasting in internet protocol networks. The arrangement includes a plurality of routers configured to transmit of different components in the internet protocol

networks to each other, at least one first multicast tree configured to transmit multicast packets through a plurality of multicast controllers to a plurality of recipients, a plurality of cell-level multicast controllers configured to transmit packets to the plurality of receivers, and a network multicast controller that is arranged to control the cell-level multicast controllers. An internet protocol network incluedes at least one second multicast tree configured to route control messages from the network multicast controller to the plurality of cell-level multicast controllers. The network multicast controller is configured to transmit control messages along the at least one second multicast tree to the plurality of cell-level multicast controllers. The control messages include information on the multicast transmission of the internet protocol network and a command configured to connect to the at least one first multicast tree of the internet protocol network configured for multicast transmissions.

As will be discussed below, Farinacci fails to disclose or suggest every feature recited in claims 1-9, 11, and 13-15, and therefore fails to provide the features discussed above.

Farinacci is directed to a data structure stored in a memory of a router. The router is located along a path between a source end station and a plurality of destination end stations in a multicast distribution tree. In response to receipt of trace packets containing a listing of network devices in the multicast distribution tree, the data structure is updated. When the source end station desires to send a multicast packet, it transmits a packet to the router. The router then writes the path information stored in the data

structure into the packet. Such path information may include a tree list that specifies the arrangement of network devices along the multicast distribution tree and an address list that specifies the IP addresses of these network devices along the multicast distribution tree. By storing the complete description of the network devices of the multicast distribution tree in the packet, routing demands on the devices along the multicast path are minimized (Farinacci, Abstract).

Applicants respectfully submit that Farinacci fails to disclose or suggest every feature recited in claim 1, and similarly recited in claim 13. Specifically, Farinacci fails to disclose or suggest, at least, "transmitting multicast data packets in at least one first multicast tree from one transmitter through a plurality of multicast controllers to a plurality of recipients; generating at least one second multicast tree configured to control messages in an internet protocol network from a network multicast controller to at least one multicast controller at cell level" as recited in claim 1, and similarly recited in claim 13.

Rather, Farinacci discloses that a SGM source router is used for receiving multicast packets, storing multicast tree information into the packet, and transmitting the multicast data packets to the next router in the multicast delivery tree. Hence, a single multicast tree is used for transmitting multicast data packets and for controlling messages at the same time (Farinacci, paragraphs [0010]-[0011]).

Accordingly, Farinacci fails to disclose or suggest every feature recited in claim 1, and similarly recited in claim 13.

Claims 2-9 and 11 depend from claim 1. Claims 14-15 depend from claim 13. Accordingly, claims 2-9, 11, and 14-15 should be allowable for at least their dependency upon an allowable base claim, and for the specific limitations recited therein.

Therefore, Applicants respectfully request withdrawal of the rejection of claim 10 under 35 U.S.C. §102(e), and respectfully submit that claims 1 and 13, and the claims that depend therefrom, are now in condition for allowance.

Claim Rejections under 35 U.S.C. §103(a)

Claim 10

The Office Action rejected claim 10 under 35 U.S.C. §103(a) as being allegedly unpatentable as obvious over Farinacci in view of Chang, *et al.* (U.S. Patent Publication No. 2002/0102967) ("Chang"). Applicants respectfully submit that the claims recite subject matter that is neither disclosed nor suggested in the combination of Farinacci and Chang.

Farinacci was discussed above. Chang is directed to an on-demand message system including a profile proxy server and a plurality of message servers coupled to a wireless network for sending messages to mobile users under conditions specified by the users and sellers (Chang, Abstract).

As previously noted above, Farinacci fails to disclose or suggest every feature recited in claim 1. Chang fails to cure the deficiencies of Farinacci. Specifically, Chang fails to disclose or suggest, at least, "transmitting multicast data packets in at least one

first multicast tree from one transmitter through a plurality of multicast controllers to a plurality of recipients; generating at least one second multicast tree configured to control messages in an internet protocol network from a network multicast controller to at least one multicast controller at cell level" as recited in claim 1. Accordingly, Farinacci in view of Chang fails to disclose or suggest every feature recited in claim 1.

Claim 10 depends from claim 1. Accordingly, claim 10 should be allowable for at least its dependency upon an allowable base claim, and for the specific limitations recited therein.

Therefore, Applicants respectfully request withdrawal of the rejection of claim 10 under 35 U.S.C. §103(a), and respectfully submit that claim 1, and the claims that depend therefrom, are now in condition for allowance.

Claim 12

The Office Action rejected claim 12 under 35 U.S.C. §103(a) as being allegedly unpatentable as obvious over Farinacci in view of Dean, *et al.* (U.S. Patent Publication No. 2003/0061333) ("Dean"). Applicants respectfully submit that the claims recite subject matter that is neither disclosed nor suggested in the combination of Farinacci and Dean.

Farinacci was discussed above. Dean is directed to network management services utilized by a user via a software-based console, used on any network connected device, viewed as a web page via the internet (Dean, Abstract).

As previously noted above, Farinacci fails to disclose or suggest every feature recited in claim 1. Dean fails to cure the deficiencies of Farinacci. Specifically, Dean fails to disclose or suggest, at least, "transmitting multicast data packets in at least one first multicast tree from one transmitter through a plurality of multicast controllers to a plurality of recipients; generating at least one second multicast tree configured to control messages in an internet protocol network from a network multicast controller to at least one multicast controller at cell level" as recited in claim 1. Accordingly, Farinacci in view of Dean fails to disclose or suggest every feature recited in claim 1.

Claim 12 depends from claim 1. Accordingly, claim 12 should be allowable for at least its dependency upon an allowable base claim, and for the specific limitations recited therein.

Therefore, Applicants respectfully request withdrawal of the rejection of claim 10 under 35 U.S.C. §103(a), and respectfully submit that claim 1, and the claims that depend therefrom, are now in condition for allowance.

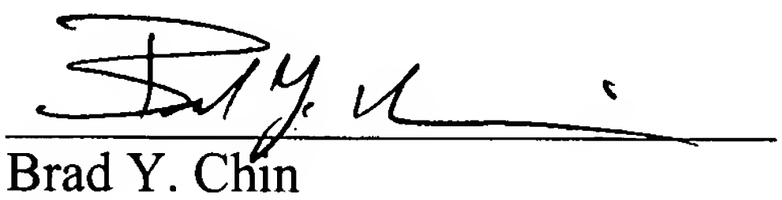
CONCLUSION

In conclusion, Applicants respectfully submit that Farinacci, Chang, and Dean, alone or in combination, fails to disclose or suggest every feature recited in claims 1-16. The distinctions previously noted are more than sufficient to render the claimed invention unanticipated and unobvious. It is therefore respectfully requested that all of claims 1-16 be allowed, and this present application be passed to issuance.

If for any reason the Examiner determines that the application is not now in condition for allowance, it is respectfully requested that the Examiner contact, by telephone, Applicants' undersigned representative at the indicated telephone number to arrange for an interview to expedite the disposition of this application.

In the event this paper is not being timely filed, Applicants respectfully petition for an appropriate extension of time. Any fees for such an extension together with any additional fees may be charged to Counsel's Deposit Account 50-2222.

Respectfully submitted,



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Enclosures: Petition for Extension of Time
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